

PYRAMID

Royal BLUE



PB-1838GX PB-738GX

**Two Channel High
Performance Power Amplifier**

PB-238GX PB-638GX

PB-1038GX

**Four Channel High
Performance Power Amplifier**

USER'S MANUAL

www.pyramidcaraudio.com

A large, light gray watermark of the word "PYRAMID" is positioned at the top of the page, partially obscured by the main heading.

congratulations...

on your purchase of a Pyramid Royal Blue Series amplifier. This amplifier extends the Pyramid tradition into a totally new series of amps, designed from the ground up to deliver the power, performance and flexibility the modern car audio enthusiast demands.

When you check the list of features offered by the PB-238GX, PB-638GX, PB-738GX, PB-1038GX, PB-1838GX, you'll know you made the right choice with a Pyramid Power amplifier.

PYRAMID

table of contents

general features	2-3	high level input connections	
features and specifications		PB-638GX/PB-I038GX	16-17
PB-238GX	4-5	mono input connections	
PB-738GX	6-7	PB-638GX/PB-I038GX	18
PB-I838GX		high level mono input connections	
PB-638GX/PB-I038GX	8-9	PB-638GX/PB-I038GX	19
electrical connections		speaker connections	
PB-238GX	10-11	PB-738GX/PB-I838GX	20
PB-638GX/PB-738GX		speaker connections	
PB-I038GX/PB-I838GX		PB-238GX/PB-638GX/PB-I038GX	21-22
stereo input connections		mounting and installation	23
PB-738GX/PB-I838GX	12	protection circuitry and troubleshooting	24
mono input connections		precautions	25
PB-738GX/PB-I838GX	13		
2/4 channel input connections			
PB-238GX	14-15		



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general features

PB-238GX

High Performance 400 Watt 4 Channel Amplifier

- 100 Watts x 4 Output
- Variable Input Level (Gain) Control
- Remote Turn On/Off
- Gold Plated RCA Inputs
- High Level MOLEX Inputs
- Power ON LED Indicator
- S/N Ratio: > 95 dB
- THD: <0.04%
- Overload Protection
- Short Circuit Protection
- Anti-Thump Turn-On

PB-638GX

High Performance 1600 Watt 4 Channel Bridgeable MOSFET Amplifier

- 400 Watts x 4 Output
- 800W x 2 Bridged Output (400W x 2 + 800W x 1)
- Dual Variable Hi/Lo Electronic Crossover Network
- Dual Variable Bass Boost (0 - +18 dB @ 60Hz)
- Variable Input Level (Gain) Control
- Remote Turn On/Off
- Gold Plated RCA Inputs
- High Level MOLEX Inputs
- Power ON LED Indicator
- LED Protection Indicator
- Remote Bass Boost
- S/N Ratio: > 95 dB
- THD: <0.04%
- Thermal Protection
- Overload Protection
- Short Circuit Protection
- Anti-Thump Turn-On
- Tri-Mode Configurable

PB-738GX

High Performance 1000 Watt 2 Channel Bridgeable MOSFET Amplifier

- 500 Watts x 2 Output
- 1000W x 1 Bridged Output
- Variable Hi/Lo Electronic Crossover Network
- Variable Bass Boost (0 - +18 dB @ 60Hz)
- Variable Input Level (Gain) Control
- Remote Turn On/Off
- Gold Plated RCA Inputs
- High Level MOLEX Inputs
- Power ON LED Indicator
- LED Protection Indicator
- Remote Bass Boost
- S/N Ratio: > 95 dB
- THD: <0.04%
- Thermal Protection
- Overload Protection
- Short Circuit Protection
- Anti-Thump Turn-On

PYRAMID

general features

PB-1038CX

**High Performance 4000 Watt 4 Channel
Bridgeable MOSFET Amplifier**

- 1000 Watts x 4 Output
- 2000 Watts x 2 Bridged Output(1000Wx2+2000Wx1)
- Dual Variable Hi/Lo Electronic Crossover Network
- Dual Variable Bass Boost (0 - +18 dB @ 60Hz)
- Variable Input Level (Gain) Control
- Remote Turn On/Off
- Gold Plated RCA Inputs
- High Level MOLEX Inputs
- Power ON LED Indicator
- LED Protection Indicator
- Remote Bass Boost
- S/N Ratio: > 95 dB
- THD: <0.04%
- Thermal Protection
- Overload Protection
- Short Circuit Protection
- Anti-Thump Turn-On
- Tri-Mode Configurable

PB-1836CX

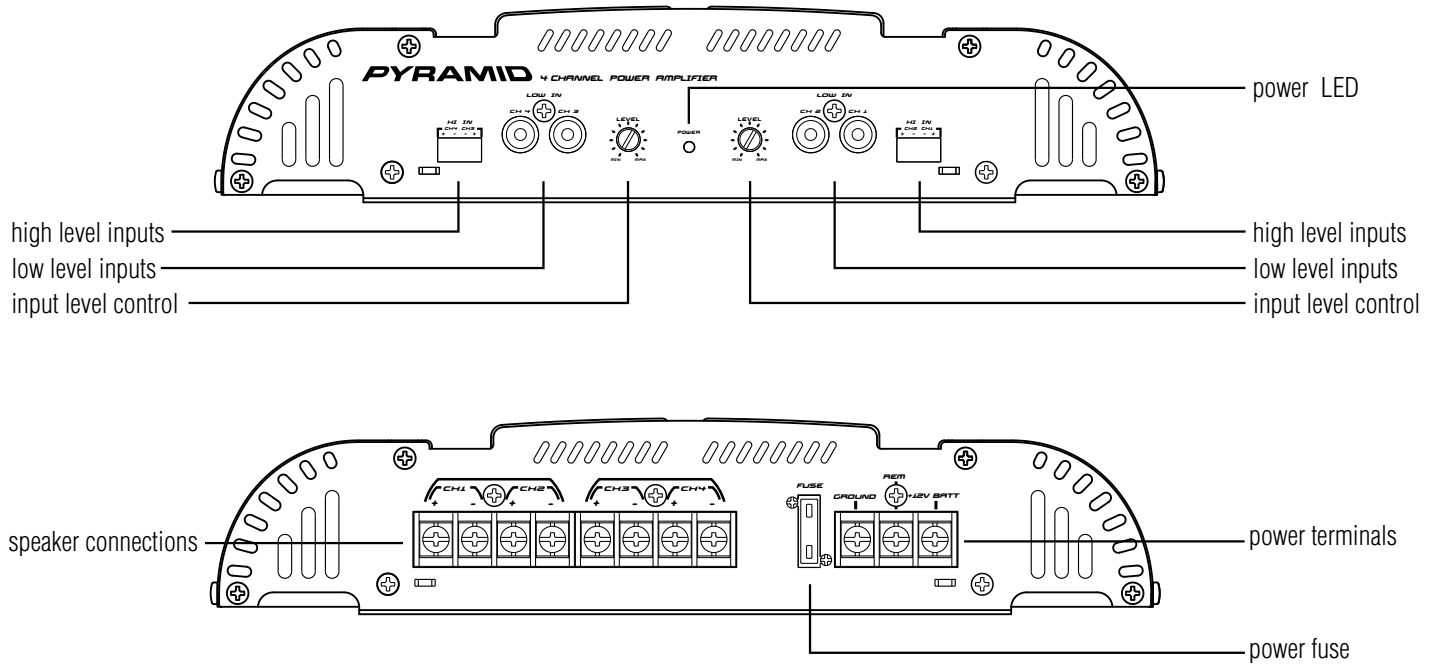
**High Performance 3000 Watt 2 Channel
Bridgeable MOSFET Amplifier**

- 1500 Watts x 2 Output
- 3000W x 1 Bridged Output
- Variable Hi/Lo Electronic Crossover Network
- Variable Bass Boost (0 - +18 dB @ 60Hz)
- Variable Input Level (Gain) Control
- Remote Turn On/Off
- Gold Plated RCA Inputs
- High Level MOLEX Inputs
- Power ON LED Indicator
- LED Protection Indicator
- Remote Bass Boost
- S/N Ratio: > 95 dB
- THD: <0.04%
- Thermal Protection
- Overload Protection
- Short Circuit Protection
- Anti-Thump Turn-On

PYRAMID

features and controls

4 ch amp PB-238GX



PYRAMID

features and specifications

4 ch amp PB-238GX

input level control use this control to match the outputs of your head unit to the amplifier. Starting with your head unit set at about the 2 o'clock position, increase the amp level control until distortion begins to occur, and reduce slightly from this point.

low level inputs this amp features gold-plated RCA input jacks for high impedance input. Use these with car stereo output which uses RCA-type connector cables.

high level inputs if your car stereo lacks RCA-type output jacks, you may connect speaker output leads to these input connectors.

power LED this indicator is illuminated when power is applied.

power fuse the fuse protects the amplifier and your car's electrical system from short circuit conditions.

power terminals use these connectors to deliver power, ground and remote turn-on control to the amplifier.

speaker connections these terminals are 14K gold plated to guarantee high conductivity and minimum signal loss.

output power @ 14.4v DC, 1KHz

RMS Power @ 4 Ohms
Maximum Power Output

30 Watts x 4
100 Watts x 4

frequency response

15 Hz-30 KHz

input impedance

low level inputs
high level inputs

10K Ohms
100 Ohms

input sensitivity

low level inputs
high level inputs

250mV
2.5V

power supply voltage

14.4V DC Neg. Ground (10.5-16V)

matching speaker impedance

stereo mode
bridged mode

2-4 Ohms
4-8 Ohms

maximum current draw

10A

dimensions (W x H x L)

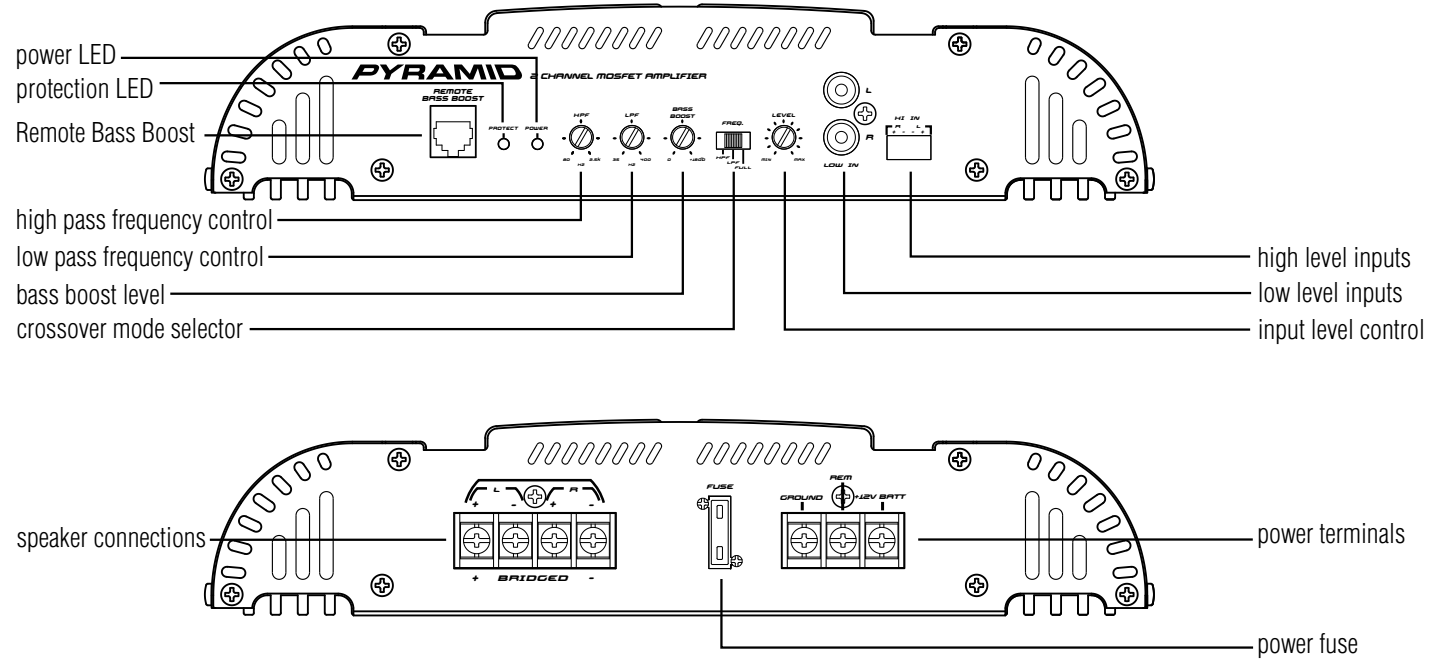
mm
inches

274 x 61 x 235
10.8 x 2.4 x 9.25



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features and controls 2 ch amp PB-738GX • PB-1238GX



PYRAMID features and specifications

2 ch amp PB-738GX • PB-1838GX

PB-738GX

PB-1838GX

- crossover mode selectors** when used with normal, full range systems, set these switches to "FULL." If you wish to use the internal crossovers to power a driver of specific frequency range, use the "LOWPASS" or "HIGHPASS" settings.
- input level controls** use these controls to match the outputs of your head unit to the amplifier. Starting with your head unit set at about the 2 o'clock position, increase the amp level controls until distortion begins to occur, and reduce slightly from this point.
- low pass frequency controls** when one or both of the crossover selector switches is in "low pass" mode, one can set the upper frequency limit for audio program sent to the speakers.
- high pass frequency controls** when the one or both of crossover selector switch is in "high pass" mode, one can set the lower frequency limit for audio program sent to the speakers.
- Remote Bass Boost** Plug in the Remote Bass Boost Control wire in here.
- bass boost level controls** this control permits adjustment of the bass level up to an increase of approximately 18 dB in either or both pairs of channels.
- low level inputs** this amp features gold-plated RCA input jacks for high impedance input. Use these with car stereo output which uses RCA-type connector cables.
- high level inputs** if your car stereo lacks RCA-type output jacks, you may connect speaker output leads to these input connectors.
- power LED** this indicator is illuminated when power is applied.
- protection LED** this indicator is illuminated when built-in protection circuitry is activated.
- power fuse** the fuse protects the amplifier and your car's electrical system from short circuit conditions.
- power terminals** use these connectors to deliver power, ground and remote turn-on control to the amplifier.
- speaker connections** these terminals are 14K gold plated to guarantee high conductivity and minimum signal loss.

output power @ 14.4v DC, 1KHz

RMS Power @ 4 Ohms	75 Watts x 2	150 Watts x 2
RMS Power @ 2 Ohms	125 Watts x 2	250 Watts x 2
Maximum Power Output	500 Watts x 2	1500 Watts x 2

frequency response ————— 15 Hz-30 KHz —————

input impedance

low level inputs ————— 10K Ohms —————

high level inputs ————— 100 Ohms —————

input sensitivity

low level inputs ————— 250mV —————

high level inputs ————— 2.5V —————

power supply voltage — 14.4V DC Neg. Ground (10.5-16V) —

matching speaker impedance

stereo mode ————— 2-4 Ohms —————

bridged mode ————— 4-8 Ohms —————

maximum current draw 20 A 40 A

dimensions (W x H x L)

mm 274 x 61 x 305 274 x 61 x 432

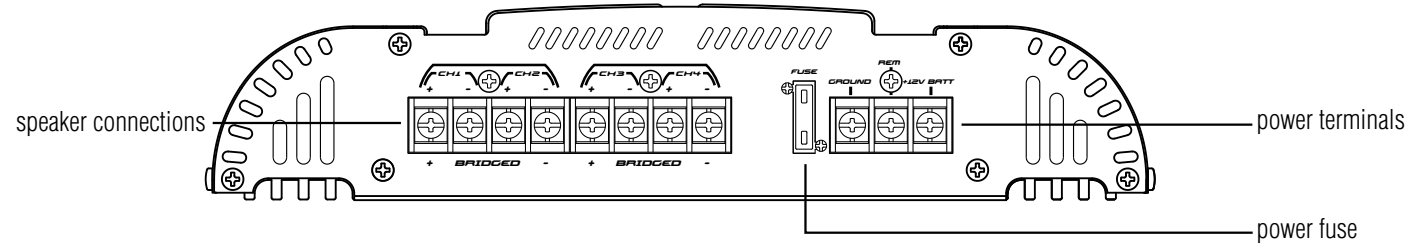
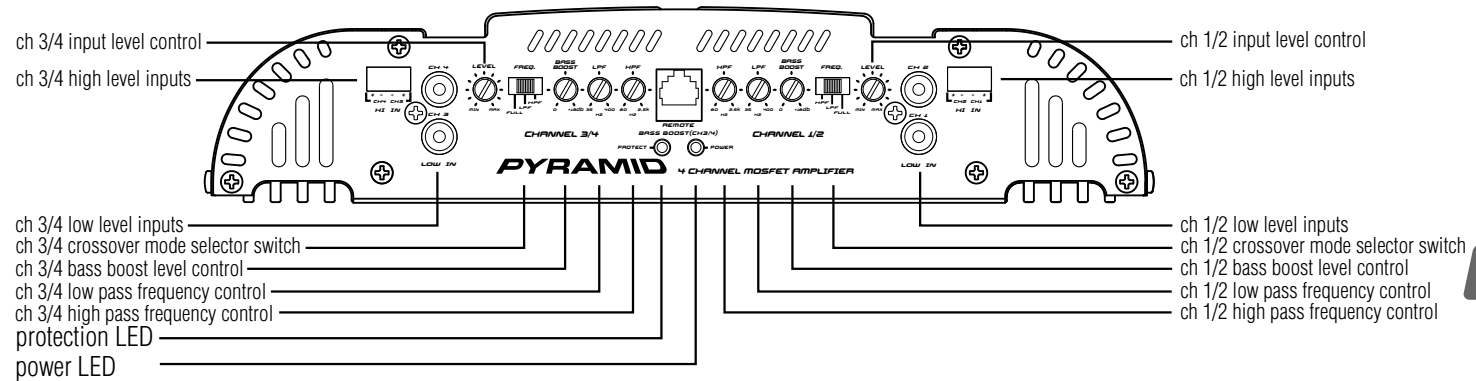
inches 10.8 x 2.4 x 12 10.8 x 2.4 x 12



PYRAMID

features and controls

4 ch amp PB-638GX • PB-1038GX



PYRAMID

features and specifications

4 ch amp PB-638GX • PB-1038GX

PB-638GX

PB-1038GX

- dual crossover mode selectors** when used with normal, full range systems, set these switches to "FULL." If you wish to use the internal crossovers to power a driver of specific frequency range, use the "LOWPASS" or "HIGHPASS" settings.
- dual input level controls** use these controls to match the outputs of your head unit to the amplifier. Starting with your head unit set at about the 2 o'clock position, increase the amp level controls until distortion begins to occur, and reduce slightly from this point.
- dual low pass frequency controls** when one or both of the crossover selector switches is in "low pass" mode, one can set the upper frequency limit for audio program sent to the speakers.
- dual high pass frequency controls** when the one or both of crossover selector switch is in "high pass" mode, one can set the lower frequency limit for audio program sent to the speakers.
- CH 3/4 Remote Bass Boost** Plug in the Remote Bass Boost Control wire in here.
- dual bass boost level controls** this control permits adjustment of the bass level up to an increase of approximately 18 dB in either or both pairs of channels.
- low level inputs** this amp features gold-plated RCA input jacks for high impedance input. Use these with car stereo output which uses RCA-type connector cables.
- high level inputs** if your car stereo lacks RCA-type output jacks, you may connect speaker output leads to these input connectors.
- power LED** this indicator is illuminated when power is applied.
- protection LED** this indicator is illuminated when built-in protection circuitry is activated.
- power fuse** the fuse protects the amplifier and your car's electrical system from short circuit conditions.
- power terminals** use these connectors to deliver power, ground and remote turn-on control to the amplifier.
- speaker connections** these terminals are 14K gold plated to guarantee high conductivity and minimum signal loss.

output power @ 14.4v DC, 1KHz

RMS Power @ 4 Ohms
RMS Power @ 2 Ohms
Maximum Power Output

35 Watts x 4
 65 Watts x 4
 400 Watts x 4

75 Watts x 4
 125 Watts x 4
 1000 Watts x 4

frequency response ————— 15 Hz-30 KHz —————

input impedance

low level inputs
high level inputs

————— 10K Ohms —————
 ————— 100 Ohms —————

input sensitivity

low level inputs
high level inputs

————— 250mV —————
 ————— 2.5V —————

power supply voltage — 14.4V DC Neg. Ground (10.5-16V) —

matching speaker impedance

stereo mode
bridged mode

————— 2-4 Ohms —————
 ————— 4-8 Ohms —————

maximum current draw 20 A 40 A

dimensions (W x H x L)

mm
inches

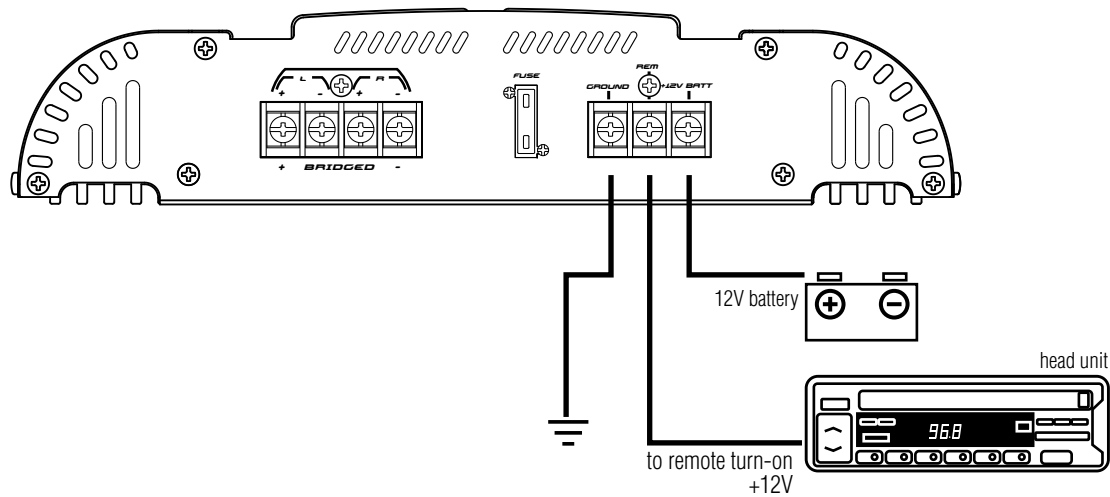
274 x 61 x 305
 10.5 x 2.4 x 12

274 x 61 x 432
 10.5 x 2.4 x 17



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electrical connections 2 ch amp PB-738GX • PB-1838GX

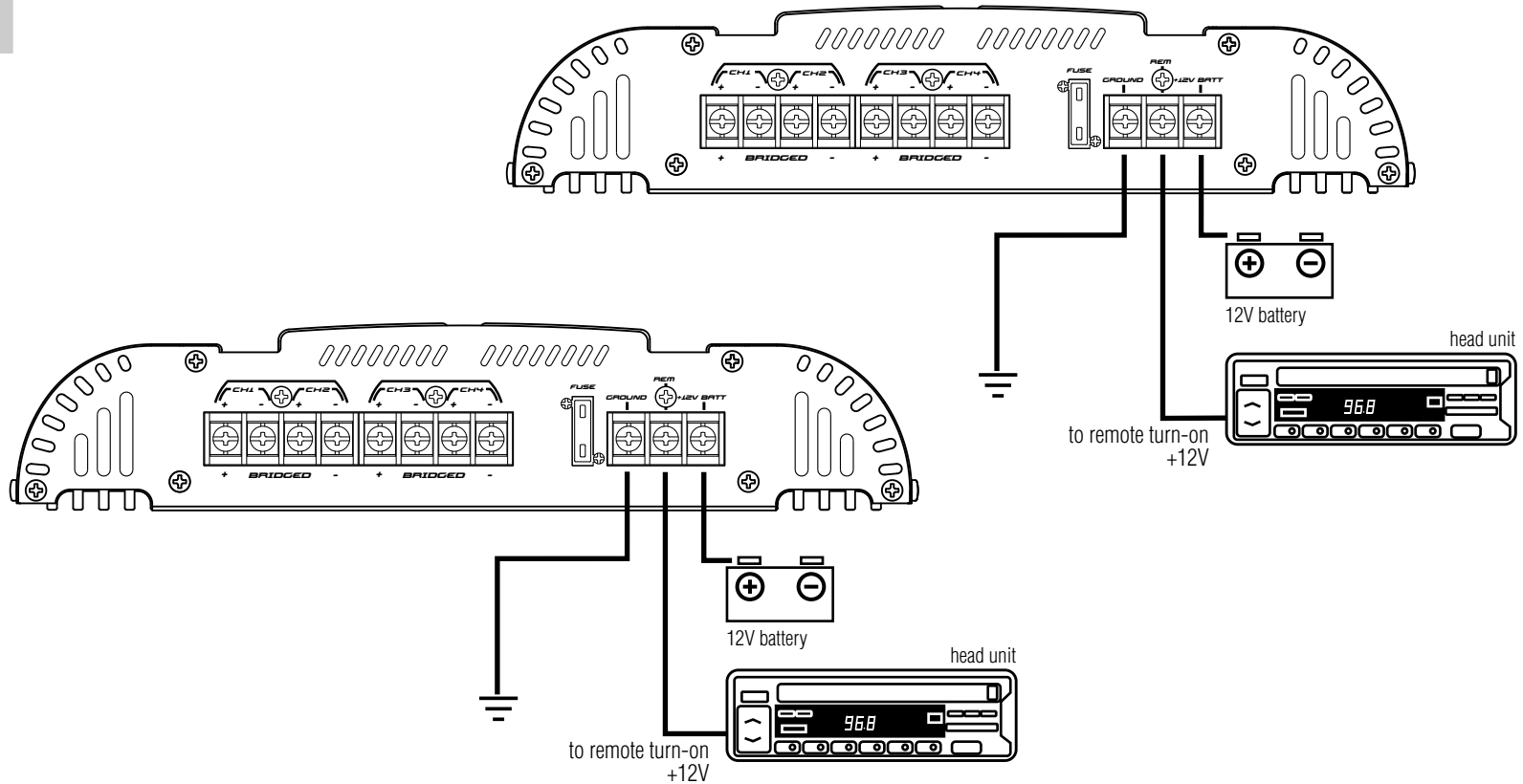


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electrical connections

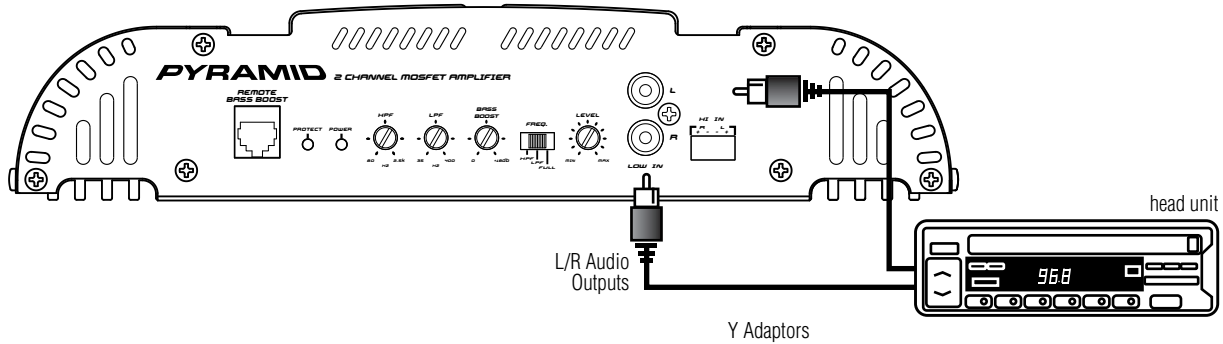
4 ch amp PB-238GX • PB-638GX • PB-1038GX



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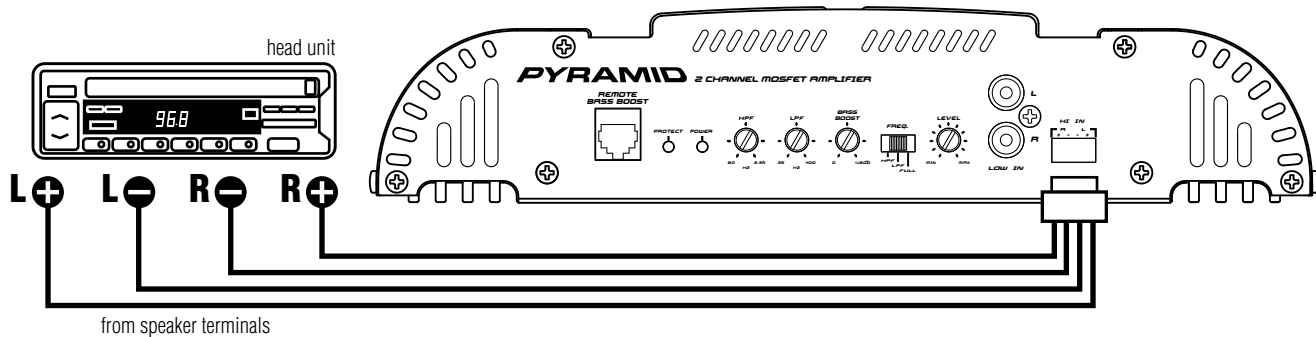
stereo input connections 2 ch amp PB-738GX • PB-1838GX

using low level inputs



12

using high level inputs

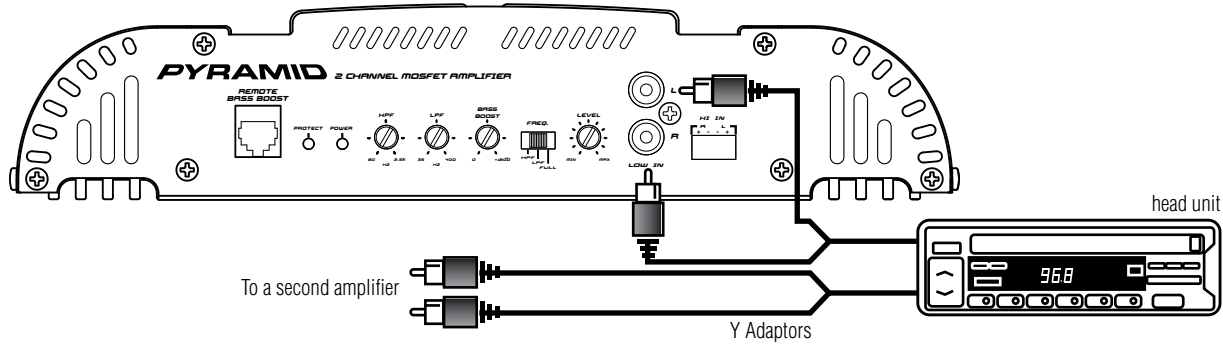


PLEASE NOTE! If using high level inputs, do not use the low level RCA inputs at the same time!

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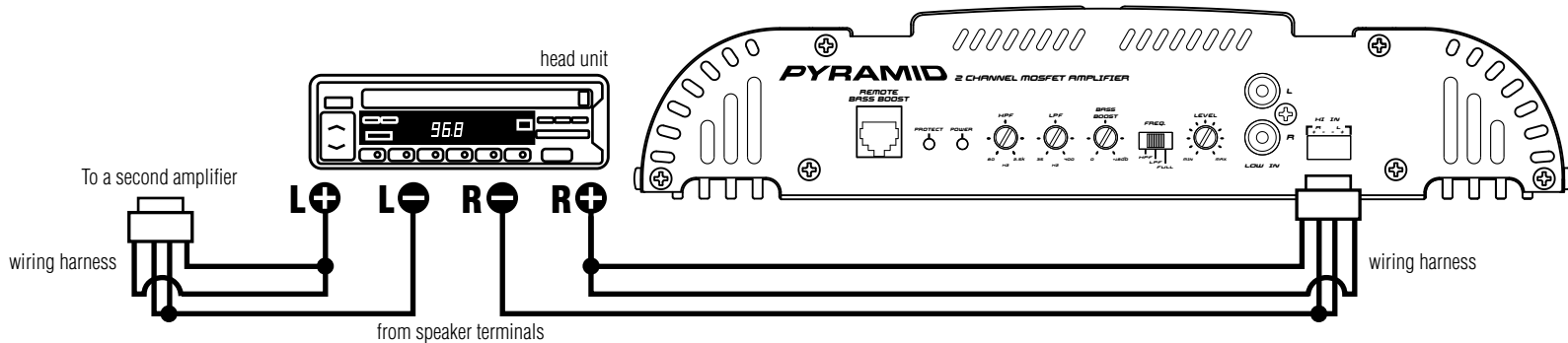
mono input connections 2 ch amp PB-738GX • PB-1838GX

using low level inputs



13

using high level inputs



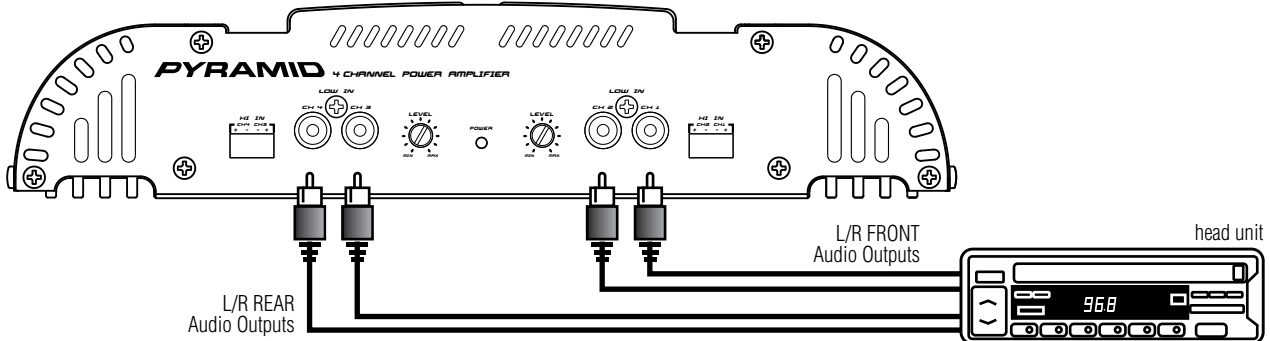
PLEASE NOTE! If using high level inputs, do not use the low level RCA inputs at the same time!

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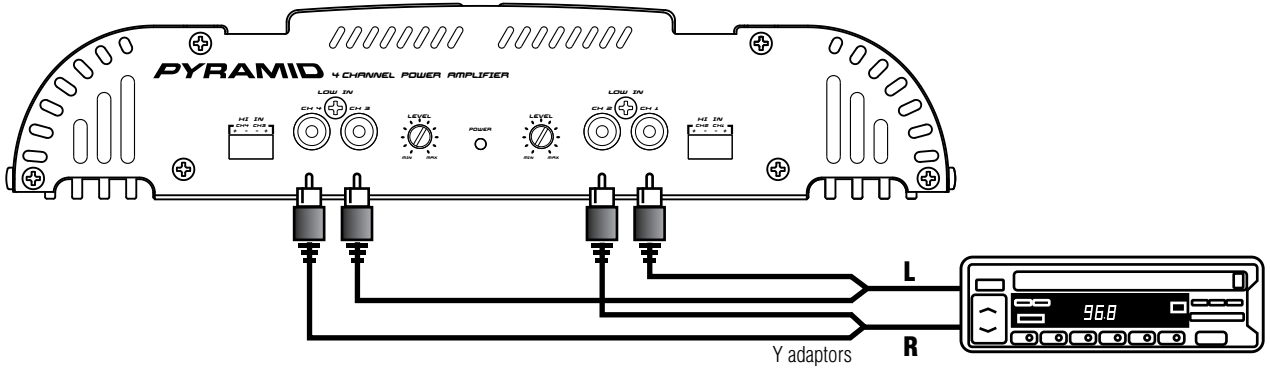
2/4 channel input connections

4 ch amp PB-238GX

4 CH input connections using low level inputs



2 CH input connections using low level inputs

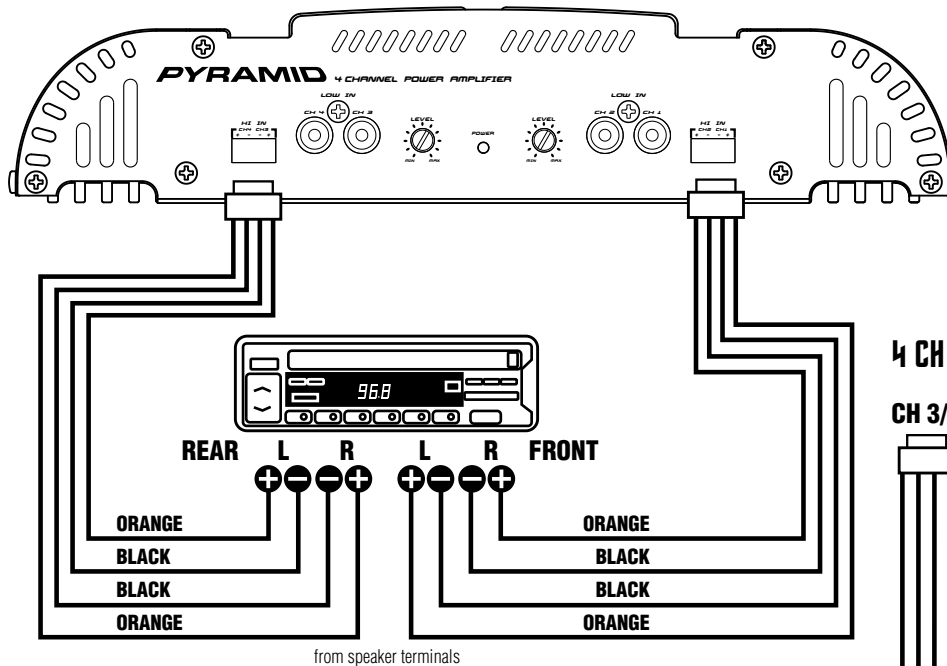


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high level input connections

4 ch amp PB-238GX

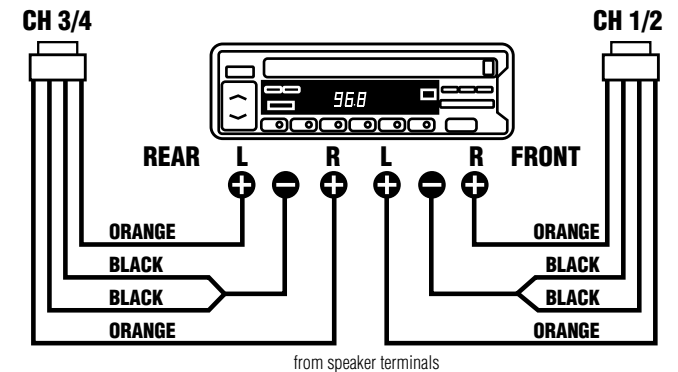
4 CH Floating ground connections



PLEASE NOTE! If using high level inputs, do not use the low level RCA inputs at the same time!

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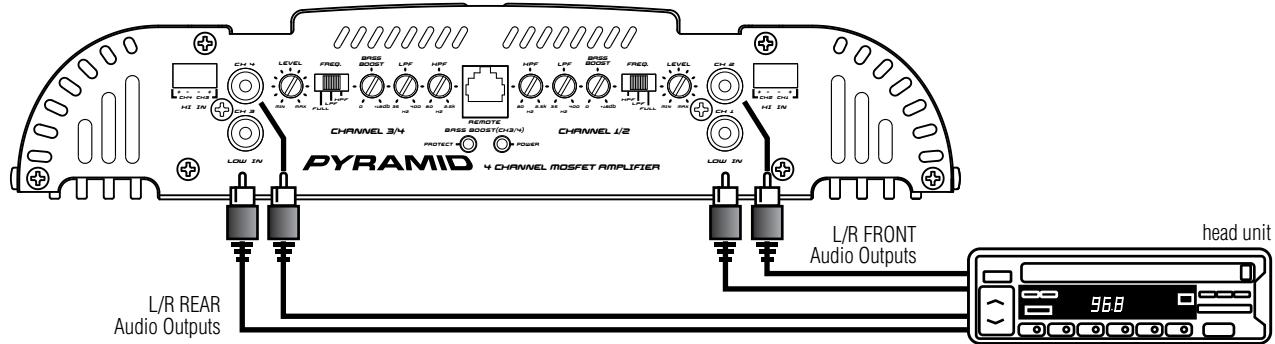
4 CH harness wiring for common ground connections



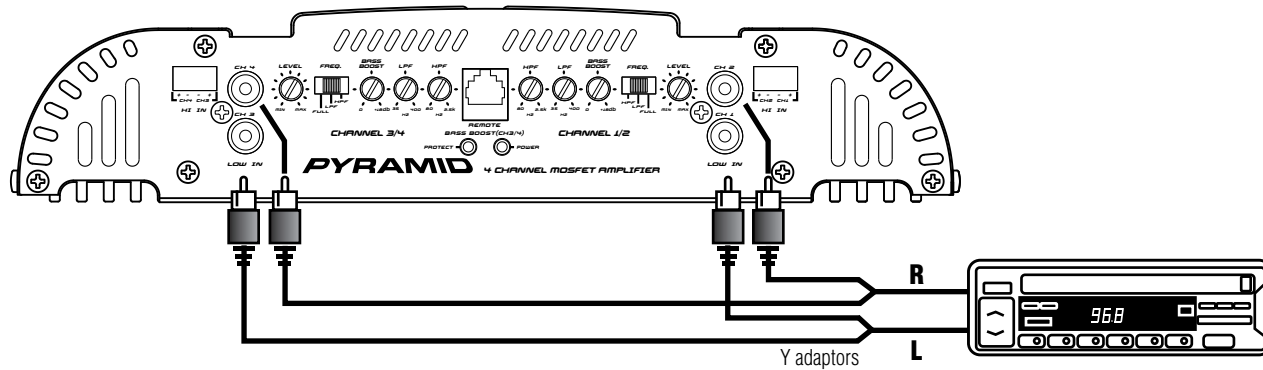
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Stereo input connections 4 ch amp PB-638GX • PB-1038GX

4 CH Stereo input connections using low level inputs



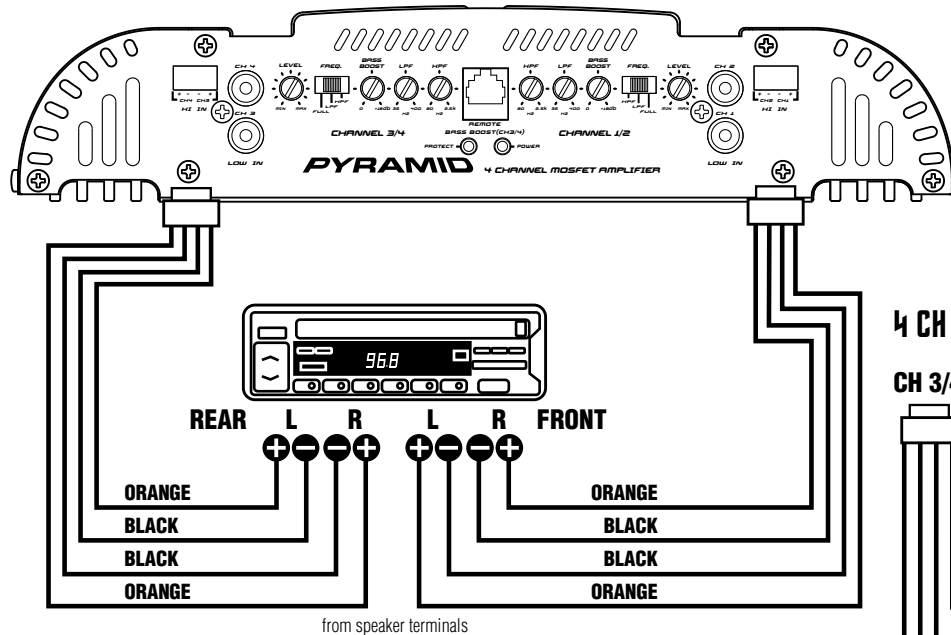
2 CH Stereo input connections using low level inputs



high level Stereo input connections

4 ch amp PB-638GX • PB-1038GX

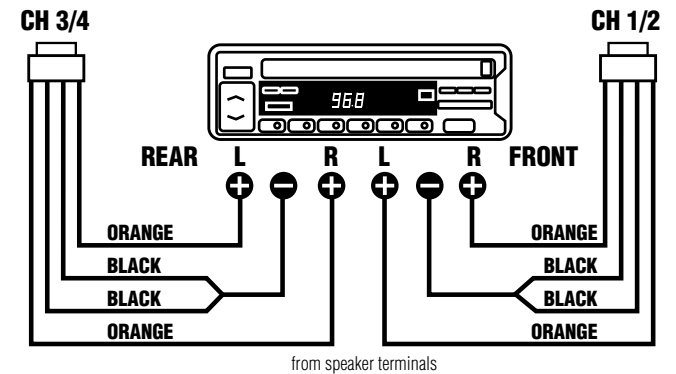
4 CH Floating ground connections



PLEASE NOTE! If using high level inputs, do not use the low level RCA inputs at the same time!



4 CH harness wiring for common ground connections

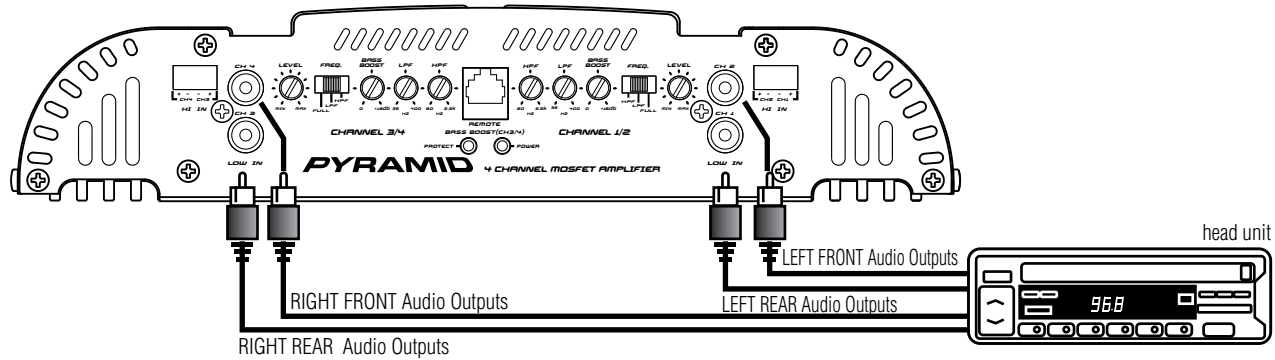


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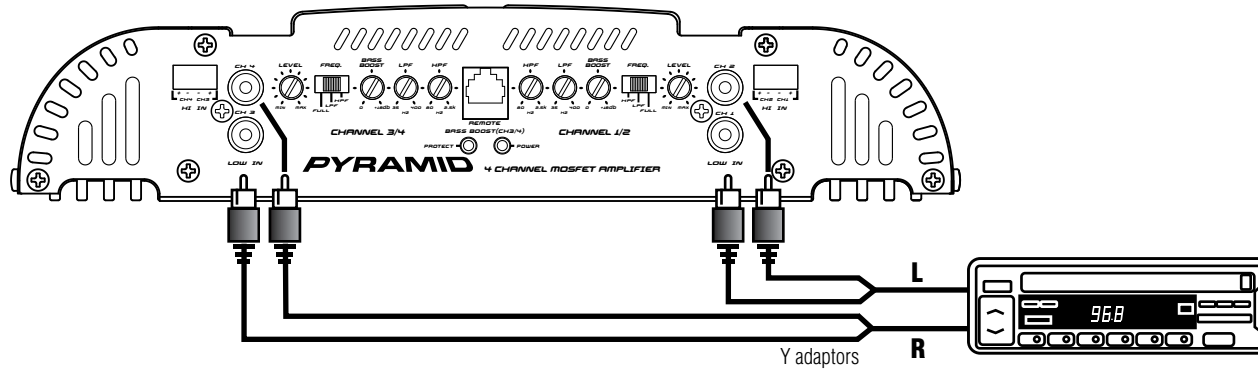
mono input connections

4 ch amp PB-638GX • PB-1038GX

4 CH mono input connections using low level inputs



2 CH mono input connections using low level inputs

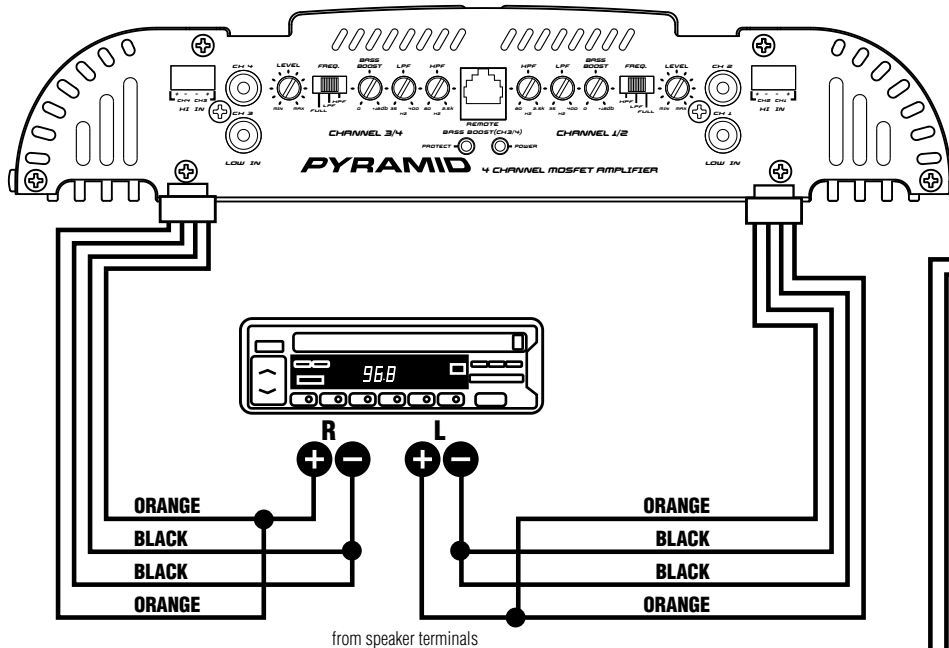


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high level mono input connections

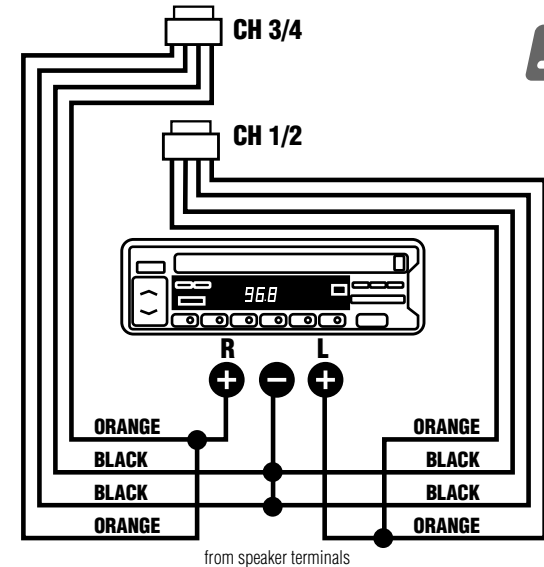
4 ch amp PB-638GX • PB-1038GX

4 CH Common ground connections



PLEASE NOTE! If using high level inputs, do not use the low level RCA inputs at the same time!

4 CH harness wiring for common ground connections

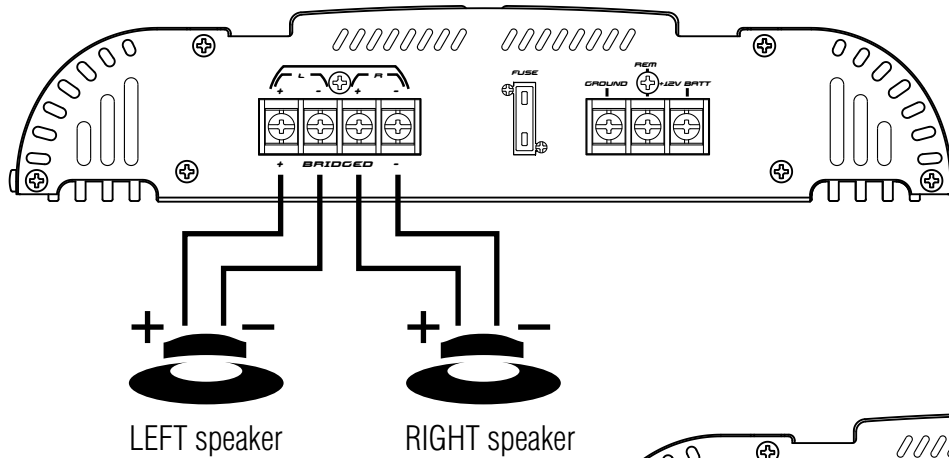


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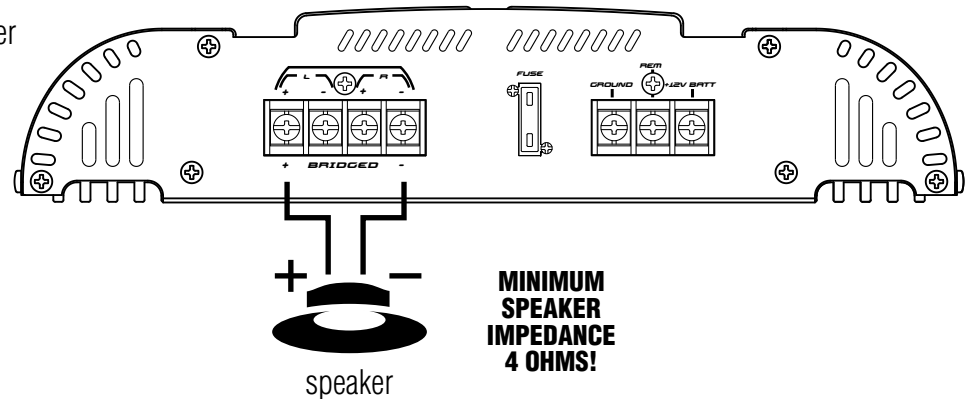
speaker connections

2 ch amp • PB-738GX • PB-1838GX

Stereo Output Mode



20

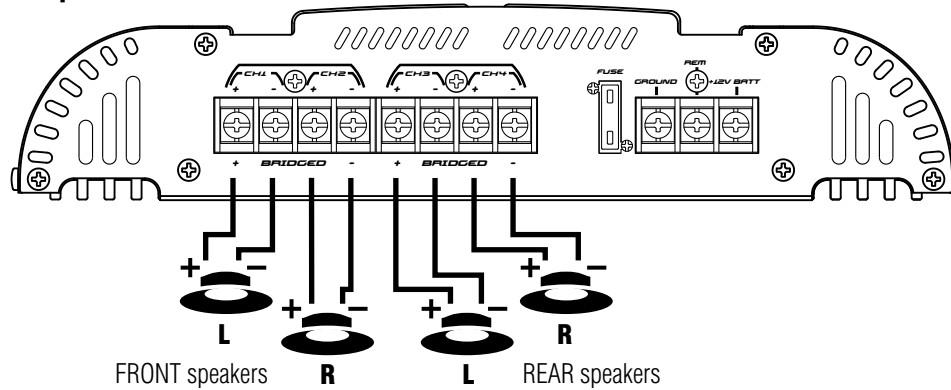


PYRAMID

speaker connections

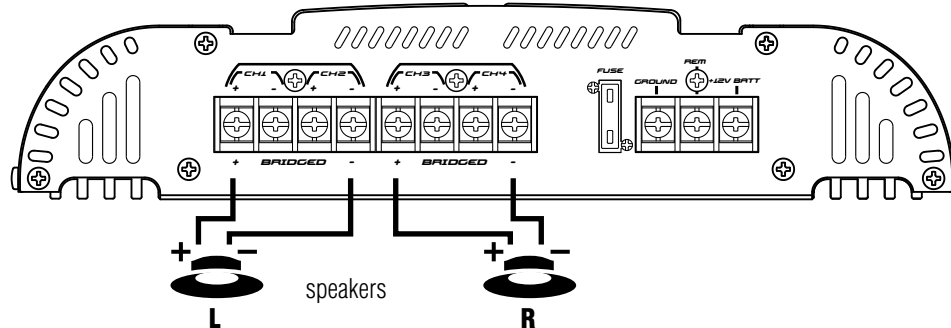
4 ch amp PB-238GX • PB-638GX • PB-1038GX

4 CH Output Mode



FRONT speakers L R REAR speakers L R

Bridged Dual Mono Output Mode (PB-238GX WITHOUT)

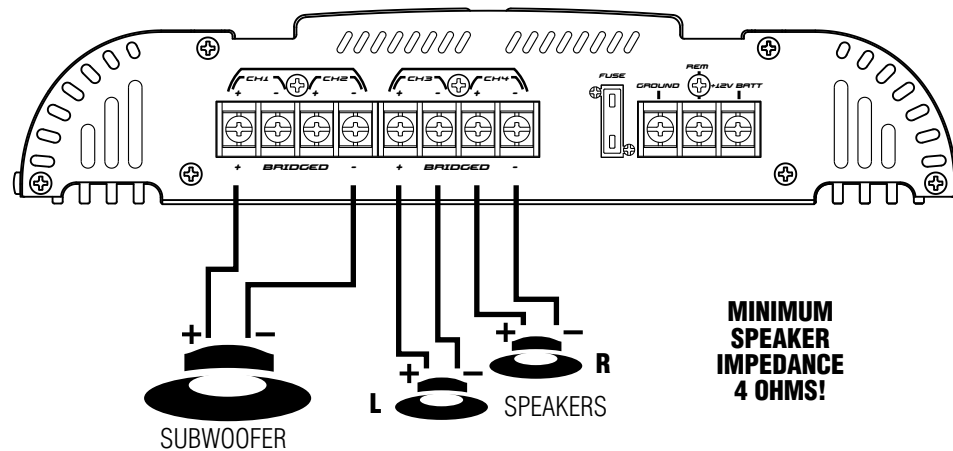


**MINIMUM
SPEAKER
IMPEDANCE
4 OHMS!**

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speaker connections 4 ch amp PB-638GX • PB-1038GX

2 CH Bridged Output Mode with Subwoofer Output



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mounting and installation

mounting

Your new Pyramid Royal Blue Series amplifier comes complete with all required mounting hardware. When determining a suitable location in your vehicle for the amp, please remember that it is a high-power electronic device capable of generating high heat.

For this reason, **always choose a location in your vehicle which has low vibration, adequate ventilation, a minimum of dust, and no moisture.** Be sure to mount the amp in such a manner as to allow reasonable airflow over the cooling fins.

Mark the location for the mounting screw holes by positioning the amp where you wish to install it and use a scribe (or one of the mounting screws) inserted in each of the mounting holes to mark the mounting surface. If the mounting surface is carpeted, measure the hole centers and mark with a felt tip pen.

Before attempting to drill the mounting holes, take note of any wires, lines or other devices in your vehicle which may be located behind the mounting surface! Then drill pilot holes in the mounting surface for the mounting screws and insert them. Tighten the screws securely.

wiring tips

When making electrical connections to your amplifier, please observe the following:

Use at least 8 gauge wire for power and ground connections.

Wire the amplifier directly to the car battery.

For the ground connection, use the shortest possible wire to a good chassis ground point.

Wire the Remote connection to the auto start lead of your head unit, equalizer or power antenna.

fuses

About power fuses:

Pyramid Royal Blue Series amplifiers feature built-in fuse systems. These fuses protect both the amplifier and the electrical system in your vehicle from fault conditions. If you ever need to replace the fuse in your Pyramid Royal Blue Series amp, use a fuse of exactly the same type and rating. A different type or rating of fuse may result in damage or fire.

Pyramid protection circuitry troubleshooting

The built-in protection circuitry in the Pyramid Royal Blue Series amplifiers will disable the amplifier if it senses an input overload, a speaker short circuit, or extreme temperature conditions.

When the protection circuit is activated by any of these conditions, the Protection LED will be illuminated.

If this occurs, carefully inspect the system to determine the source of the problem.

- If the shutdown was a result of a thermal overload condition, allow the amplifier to cool down before attempting to restart it.
- If the shutdown was a result of an input overload, or speaker short circuit, be sure to correct the condition before restarting.

The amplifier can be restarted by turning the remote power OFF and then ON again.

No output.

Confirm that all terminal strip connections are secure and tight.

Check both in-line and built-in fuses. Both the +12V and the Remote terminals must have +12v referenced to chassis ground.

Confirm that the audio signal source (car radio, equalizer, etc.) is connected and is supplying output signal. To check if the amp is supplying signal, unplug the cables from the signal source (but leave them plugged into the amp). Briefly tap the center pin of each of the disconnected RCA plugs with your finger. This should produce a noise (feedback) in your speakers.

Only one channel works.

Confirm that all terminal strip connections are secure and tight.

Check the Balance control on the head unit (or other source) to verify that it is set to its midpoint.

If you are using the Low Level RCA input, reverse the input plugs at the amplifier (i.e., switch the L with the R). If the channels which is silent switches to the other side, the problem is either in the head unit/other source or the connecting cables.

Weak output.

Readjust the Input Level Control(s) to better suit the input signal.

Noise in the audio.

If the noise is a “whine” whose pitch follows the engine speed, confirm that the amplifier and any other signal sources (head unit, etc.) are properly grounded.

If the noise is a “clicking” or “popping” noise whose rate follows the engine speed, this usually means that the vehicle is equipped with resistor spark plugs and wires, or that the ignition is in need of service.

Check the routing of the speaker and input wires to make sure they are not adjacent to wires which interconnect lights and other accessories.

If the above steps fail to improve or clear noise interference, the system should be checked by a professional mobile audio installer.

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precautions

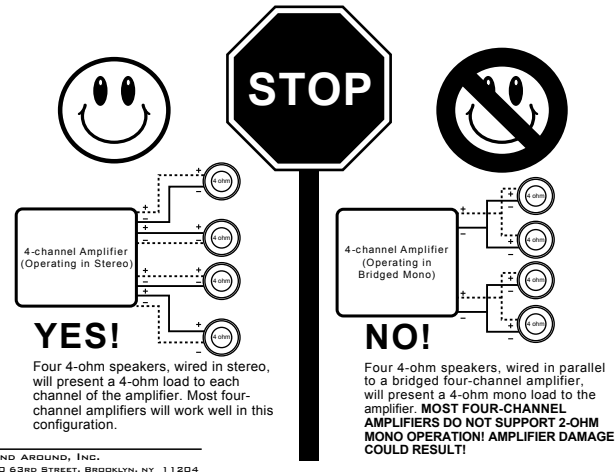
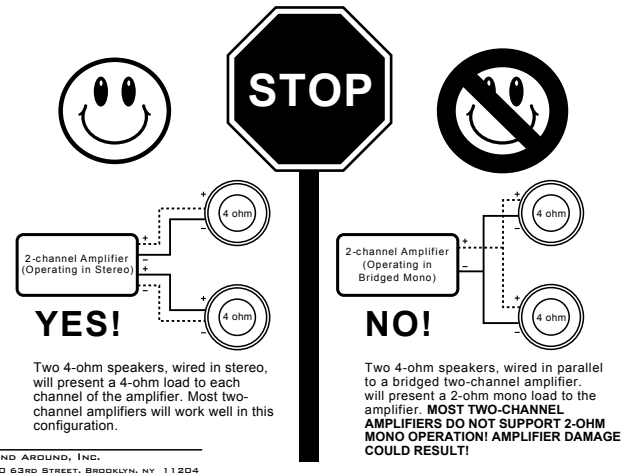
notes

Do not operate the amplifier when it is unmounted. Attach all audio system components securely within the automobile to prevent damage, especially in an accident.

Do not mount this amplifier so that the wire connections are unprotected, or in a pinched condition, or likely to be damaged by nearby objects.

Before making or breaking power connections in your system, disconnect the vehicle battery. Confirm that your head unit or other equipment is turned off while connecting the input jacks and speaker terminals.

If you need to replace the power fuse, do so only with a fuse identical to that supplied with the amplifier. Using a fuse of a different type or rating may result in damage that isn't covered in the manufacturer's warranty.



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All Pyramid products are carefully constructed and thoroughly tested before shipment. Products purchased in the USA are warranted to be free of defects in material and workmanship for two (2) years from the date of purchase. This warranty is limited to the original retail purchase.

Should the product fail due to factory defects in material or workmanship, your unit will be repaired or replaced at the sole discretion of Pyramid.

To obtain warranty service you must first call our Consumer Return Hotline number at (718) 236-6948 to obtain a Return Authorization number. This R.A.# must appear on the outside of your package and on all paperwork relating to your return.

When returning a product to us for warranty service it must be carefully packed and shipped prepaid to:

R.A.#
Pyramid Service Center
1600 63rd Street
Brooklyn, NY 11204

Royal
BLUE

You must also include the following items:

- A copy of your sales receipt or other proof of purchase
- A brief letter indicating the problem you are experiencing
- include in your letter your return address, daytime phone number, and R.A. number
- also include a check or money order for \$12.00 for return shipping, handling, and insurance, or provide your Visa/MC number with expiration date.

Our obligation under this warranty is limited to the repair or replacement of the defective unit when it is returned to us prepaid. This warranty will be considered void if the unit was tampered with, improperly serviced, or subject to misuse, neglect, or accidental damage.

limited warranty policy